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ABSTRACT

Depressive disorders are chronic illnesses affecting women and their families for extended periods of time. This paper summarizes research related to the effects of maternal depression on children's short and long term adjustment. Children of depressed mothers are at risk for internalizing and externalizing disorders. Genetics account for a small portion of these problems. Since depressed mothers tend to withdraw or show intrusive, hostile behaviors with their children, parent-child interaction problems account for the majority of youth adjustment problems, particularly when mothers' depression is severe, occurs during infancy, is chronic, and is paired with high family conflict or separation. Individual youth differences may relate to gender. Interventions, aimed at education, open communication, and treatment of parent-child attachment problems, are recommended. (Contains 22 references.) (Author)



EFFECTS OF MATERNAL DEPRESSION ON YOUTH ADJUSTMENT

A Research Paper
Presented to
The Department of Educational Leadership, Counseling,
and Postsecondary Education
University of Northern Iowa

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Abstract

Depressive disorders are chronic illnesses affecting women and their families for extended periods of time. This paper summarizes research related to the effects of maternal depression on children's short and long term adjustment. Children of depressed mothers are at risk for internalizing and externalizing disorders. Genetics account for a small portion of these problems. Since depressed mothers tend to withdraw or show intrusive, hostile behaviors with their children, parent-child interaction problems account for the majority of youth adjustment problems, particularly when mothers' depression is severe, occurs during infancy, is chronic, and is paired with high family conflict or separation. Individual youth differences may relate to gender. Interventions aimed at education, open communication, and treatment of parent-child attachment problems are recommended.



Effects of Maternal Depression on Youth Adjustment

Depression is the most commonly diagnosed psychiatric illness (Gotlib & Goodman, 1999). In fact, 8-20% of all people will experience at least one episode of clinical depression at some point in their lives (Gotlib & Goodman, 1999). Women, however, are twice as likely than men to receive the diagnosis and are at increased risk for depressive episodes during the child rearing years (Gotlib & Goodman, 1999). Specifically, studies have demonstrated that 10-15% of mothers will experience at least one episode of post partum depression (Murray, Sinclair, Cooper, Ducournau, Turner, & Stein, 1999; Wright, George, Burke, Gelfand, Teti, 2000). Infants as well as older children are potentially affected in a variety of ways by their mothers' depression. As a result, the effects of maternal depression on youth adjustment deserve attention.

There are two main types of unipolar depression. The first one is major depressive disorder (MDD) which is marked by two main symptoms: depressed mood and loss of interest or pleasure in daily activities. Other symptoms include weight loss or gain, loss of appetite, fatigue, sleep disturbance, psychomotor agitation or retardation, feelings of guilt or worthlessness, and concentration difficulties. To meet DSM IV diagnostic criteria for an episode of MDD, individuals must exhibit at least five additional symptoms along with the two main symptoms of depression for a period of at least two weeks without the presence of manic or hypomanic episodes. The other type of depressive disorder is dysthymia. It is marked by less intense depressive symptoms in comparison to MDD, but its symptoms are more chronic in nature. In order to meet DSM IV diagnostic criteria for dysthymia, individuals must have some symptoms of depression lasting for the majority of a two year period.



As described by Gotlib and Goodman (1999), 80% of people diagnosed with one episode of MDD experience at least one recurrent episode of MDD at some time in their lives. As individuals experience more episodes of MDD, their risk for future episodes increases. In fact, individuals who have experienced three or more episodes of MDD, have demonstrated relapse rates as high as 40% within 12-15 weeks of recovery. It is also common for individuals diagnosed with MDD to experience symptoms of dysthymia in between periods of more severe depressive symptoms.

Depression is a chronic illness affecting many individuals and their families for extended periods of time. As one could expect, parental depression has been highly correlated with family stress in many studies (Beardslee, Versage, & Gladstone, 1998; Compas, Langrock, Keller, Merchant, Copeland, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999; Sinclair & Murray, 1998). How does maternal depression and its accompanying family stress affect children's adjustment? This paper will summarize current research related to this question. Specifically, five areas will be discussed: general effects of maternal depression on children, risk pathways, long term youth adjustment outcomes, mediators of risk, and treatment issues.

General Effects of Maternal Depression on Children

Gotlib and Goodman (1999) described that the first studies aimed at investigating the effects of parental depression on children began in the 1960's when Mednick and Schulsinger introduced the "high-risk method" for the study of psychopathology. Specifically, the researchers followed at risk groups in order to trace and identify variables associated with prediction, early identification, and prevention of schizophrenia. They compared offspring of parents diagnosed with schizophrenia to offspring of well parents and to offspring of parents diagnosed



with depression because the researchers considered the latter group to be one of "low" risk in comparison to the schizophrenic "high" risk group. Researchers found that most children of parents diagnosed with depression demonstrated better adjustment than children of parents who had been diagnosed with schizophrenia. Children of parents with depression were not as well adjusted in comparison to children raised by parents who had not be diagnosed with psychiatric disorders. These findings led to increased research into the effects of parental depression on youth adjustment.

Beardslee et al. (1998) also reviewed research regarding the effects of parental depression on children in the last ten years. They stated that 41-77% of children whose parents have depressive disorders will eventually be diagnosed with psychiatric disorders themselves. Studies showed that kids of parents with MDD are four times more likely to experience at least one episode of clinical depression in their lives when compared with kids who do not have parents with psychiatric diagnoses. In fact, children of depressed parents have a 40% chance of experiencing an episode of depression by age 20. They have a 60% chance of experiencing such symptoms by age 25. Externalizing disorders, internalizing disorders, general difficulties in functioning at life tasks, increased feelings of guilt, and attachment problems in youth have all been linked to parental depression as well.

Criticism regarding past research has provoked change in current research practices regarding the effects of parental depression on youth adjustment (Beardslee et al., 1998; Gotlib & Goodman, 1999; Essex, Klein, Meich, & Smider, 2001; Wright et. al, 2000). Meta analyses have recently been used in an attempt to distinguish between factors most associated with specific risks and outcomes. This resulted from difficulties in differentiating between effects of parental depression



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and those associated with other comorbid psychiatric diagnoses such as personality disorders. The most recent research has also included use of multiple, objective informants regarding childhood adjustment. This resulted from evidence suggesting that reliance on parents with depression for reports regarding the adjustment of their children could lead to false positive reports of maladjustment. Depressed parents may view their children as being maladjusted as a result of their negative thinking styles and not as a direct result of their children's behavior. Finally, use of longitudinal studies has been used in recent research regarding parental depression in an attempt to ascertain immediate versus long term youth effects.

Risk Pathways

Researchers have described several pathways of risk for children growing up with mothers who have depressive disorders. Genetic influences represent one such pathway. Environmental influences are responsible for other pathways of risk and are best explored in relation to youth age and developmental stage.

Nature Versus Nurture

Based on family, twin, and adoption studies, several researchers agreed that genetics do play a partial role in the transmission of affective disorders across generations with bipolar disorders being associated with more genetic influence than unipolar depressive disorders (Beardslee et al., 1998; Gotlib & Goodman, 1999; Silberg & Rutter, 2002). No studies indicated that genetics account for the entire transmission of risk from parents with unipolar or bipolar depressive disorders to their offspring (Beardslee et al., 1998; Gotlib & Goodman, 1999; Silberg & Rutter, 2002). Rather, studies indicated that genetic influences at best account for approximately 36% of the transmission of unipolar depression between parents and children and are most involved when age of onset is during adolescence as opposed to during childhood (Silberg & Rutter, 2002). Approximately one out of four to



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five children of mothers with unipolar depression will develop unipolar depression themselves (Gotlib & Goodman, 1999). Other "inheritable" risk factors associated with unipolar depression are environmental in nature such as those related to parent-child relationship patterns which are passed from generation to generation (Beardslee et al., 1998; Gotlib & Goodman, 1999; Lyons-Ruth, Lyubchik, Wolfe, Bronfman, 2002; Silberg & Rutter, 2002).

Fetal Development

Field (2002) suggested that fetal development may be impacted by mothers' use of medication and by mothers' depressed emotional states. Pregnant mothers with depression are more prone to inactivity and have been more likely to report hyperactivity in their fetuses as compared to non depressed pregnant mothers. Such hyperactivity may be a response to depressed mothers' lower levels of activity and could indicate babies' needs for more stimulation.

At birth, babies born to mothers with depression show further signs of having been affected by their mothers' use of medication or depressed emotional states. Field's data indicated that infants of mothers with depression demonstrated less responsiveness, more fussiness and inconsolability, more disorganized sleep patterns, more elevated amounts of stress hormones (i.e., norepinephrine and cortisol) and more relative right frontal EEG activation at birth compared to infants of mothers without depression.

Infant Development

Studies have shown that depression in mothers during infancy has the potential to disrupt child development at a particularly crucial time. Researchers agreed that this is due in part to the fact that mothers who are depressed are more likely than non depressed mothers to show decreased sensitivity, responsiveness, and positive emotions along with increased negative emotions or verbalizations



towards their infants (Ashman & Dawson, 2002; Beardslee et. al, 1998; Field, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999; Murray et. al, 1999a; Wright, George, Burke, Gelfand, & Teti, 2000). In response to maternal insensitivity to infant emotion, some research indicated that babies do not learn how to regulate their attention or emotions, and the psychobiological systems responsible for affect regulation do not properly develop (Ashman & Dawson, 2002; Field, 2002). This has been evidenced by increased levels of stress hormones such as cortisol and norepinephrine as well as by long lasting abnormal EEG patterns which have been marked by decreased left frontal brain activity in infants of depressed mothers (Ashman & Dawson, 2002). Researchers hypothesized that infancy is likely a sensitive period for brain development, and when psychobiological systems responsible for affect regulation do not properly develop, individuals face challenges in modulating stress responses throughout their lives, thus placing children and adults at risk for developing a variety of internalizing or externalizing disorders (Ashman & Dawson, 2002).

Not all depressed mothers withdraw from interaction with their babies (Ashman & Dawson, 2002; Field, 2002; Gotlib & Goodman, 1999; Lyons-Ruth et. al, 2002; Murray et. al, 1999a). Instead, some show intrusive behavior with their infants, over stimulating them by poking, tickling, and quickly offering or withdrawing toys (Ashman & Dawson, 2002; Gotlib & Goodman, 1999; Lyons-Ruth et. al, 2002; Murray et. al, 1999a). These mothers may exhibit hostility towards their babies as well (Gotlib & Goodman, 1999; Lyons-Ruth et. al, 2002).

In a comparison of "withdrawn" versus "intrusive" interaction patterns of mothers diagnosed with depressive disorders, Field (2002) stated that more depressed mothers exhibited the withdrawn style in her study. Babies of depressed mothers exhibiting withdrawn behavior patterns were more likely than babies of



intrusive mothers to demonstrate inactivity and disengagement from their mothers. In contrast, babies of depressed mothers exhibiting intrusive interaction patterns were fussier than babies of withdrawn mothers diagnosed with depression. In general, the withdrawn style of parent behavior affected male infants more negatively than female infants whereas the intrusive style of parenting more negatively affected females. The researcher noted that in animal studies, lack of maternal stimulation correlated with neuroendocrine imbalances. Similarly, babies of mothers exhibiting the withdrawn style of behavior had lower dopamine levels than babies of mothers interacting with their babies in intrusive ways.

Other researchers reported inconsistent gender differences in regards to infant adjustment as it relates to depressed mothers' interaction styles. For example, Lyons-Ruth et. al (2002) reported that both withdrawn and intrusive parenting styles were harder on boys in comparison to girls during infancy in their study. The authors went on to explain, however, that older girls of depressed mothers often showed different signs of maladjustment as compared to boys. It is possible that behavior differences in infancy may predict different types of maladjustment as children age. More research is needed in this area.

Another question for further research concerns the discreteness of interaction styles between infants and mothers. Are depressed mothers' behaviors with their infants marked either by withdrawal or intrusiveness consistently over time? Do some depressed mothers exhibit both withdrawal and intrusive behaviors? Past and future validity of findings regarding these two styles of parenting are dependent on the degree of similarity between mothers' complete repertoires of behavior and the mothers' behavior during specific clinical observations. With this in mind, caution should be used in categorizing mothers as displaying particular styles of interaction with their babies on the basis of single clinical observations.



Effects of Maternal Depression

Whether marked by withdrawal, intrusiveness, hostility, or a combination of these styles, research has indicated that infants are negatively affected by their depressed mothers' interaction patterns (Ashman & Dawson, 2002; Gotlib & Goodman, 1999). Ashman and Dawson (2002) observed that babies of depressed mothers demonstrated decreased vocalizations, decreased activity levels, decreased expression of positive feelings, and increased expression of irritable feelings in ways that mirrored their depressed mothers' behavior. Overall, these babies of depressed mothers tended to show signs of stress when interacting with their mothers during observation sessions as evidenced by high heart rates, low vagal tones, and high cortisol levels. Researchers hypothesized that this stress might be directly resulting from mothers' scary, hostile behaviors or infants' inability to have their emotions calmed by their mothers. Murray et. al (1999a) concluded the same. Gotlib and Goodman (1999) also reported that babies of depressed mothers exhibited lower scales than babies of non depressed mothers on the Bayley Scales of Infant Development, including scores on mental, cognitive, and developmental sub scales regardless of mothers' educational levels.

Overall, increased problems for infants of depressed mothers have been associated with maternal depression lasting six months or more (Field, 2002). Field (2002) noted that children of mothers who had experienced post partum depression up until but not beyond children's six month checkups showed signs of normal development at year one checkups.

Early Childhood Development

As in infancy, symptoms of MDD and dysthymia interfere with mothers' abilities to parent in a variety of ways during the early childhood years (Ashman & Dawson, 2002; Beardslee et. al, 1998; Compas et. al, 2002; Field, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999; Lyons-Ruth et. al, 2002; Murray,



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Woolgar, Briers, & Hipwell, 1999; Wright et. al, 2000). For example, Beardslee et. al (1998) described that mothers who are depressed are more likely to exhibit irritability and overall negative affect in their interactions with children during the toddler and preschool years. Likewise, Gotlib and Goodman (1999) reported that depressed mothers of toddlers talk less to their children, express more negative emotions, demonstrate poorer conflict resolution skills, communicate more disapproval, provide less structure or discipline, and respond less to their children overall in comparison to non depressed mothers of toddlers. Authors hypothesized that mothers with depression are focused or are in need of focusing on their own emotional worlds and thus, find it difficult to attend to their children's inner worlds. Similarly, retrospective studies have indicated that diagnoses of depression are related to difficulties in relationships with early caregivers, suggesting the possibility that parenting difficulties are the "inherited" traits between generations of depression in families and that depressive disorders are consequences of such parenting.

Although results have been mixed as to the degree of relatedness between variables, several researchers agreed that depressed mothers' parenting styles may be linked to the formation of insecure or disorganized attachments between mothers and young children, especially when maternal depression is chronic in nature or when withdrawal interaction patterns persist despite remittance of depressive symptoms (Ashman & Dawson, 2002; Gotlib & Goodman, 1999; Ijzendoorn, Schuengle, Bakermans-Kranenburg, 1999; Lyons-Ruth et. al, 2002; Murray et. al, 1999a). Gladstone and Beardslee (2002) reported that 79% of toddlers of depressed mothers demonstrated symptoms of insecure attachments with their mothers whereas 24% of children of non depressed mothers in their study demonstrated insecure attachment patterns with their mothers. Gladstone and



Beardslee hypothesized that depressed mothers may interpret normal assertive behavior in toddlers as rejection towards themselves which could lead them to feel guilty. In response, mothers may act in overprotective or withdrawn ways towards their young children. This, in turn, could increase risks for disorganized or insecure attachments.

Disruptions in attachment cause children to feel insecure in how they see themselves and in terms of how they view themselves in relation to others because children's relationships with their primary caregivers serve as models for how children view themselves and their relationships throughout life (Lyons-Ruth et. al, 2002). Several authors described how insecure or disorganized attachments between mothers and children leave children at risk for developing negative self concepts, internalizing or externalizing behavior problems, and difficulties in relating with peers or adults (Gladstone & Beardslee, 2002; Gotlib & Goodman, 1999; Lyons-Ruth et. al, 2002; Wright et. al, 2000).

In line with this theory regarding the maladjustment of young children living with mothers who have been diagnosed with depression, Gotlib and Goodman (1999) reported that toddlers' prosocial behavior scores were positively correlated with mothers' levels of responsiveness to their children. Thus, when mothers' responsiveness went down, toddler prosocial behavior scores went down too.

Likewise, Lyons-Ruth et. al (2002) linked disorganized attachment between preschoolers with depressed mothers to preschool children's use of controlling behaviors in their comparison of eighteen month to six year old children of depressed and non depressed mothers. In this way, it has been theorized that children with disorganized attachments to their mothers adopt controlling interaction styles with others in an attempt to get their needs met. Types of controlling behaviors exhibited by young children of depressed mothers varied according to



gender however. Young boys of depressed mothers were more likely than girls and more likely than boys or girls in the non depressed parent group to engage in controlling, punitive behaviors like acts of hostility, aggression, coercion, or humiliation. On the other hand, young girls of depressed mothers who displayed signs of disorganized attachment with their mothers were more likely than boys and more likely than girls or boys in the non depressed mothers' group to engage in controlling, caregiving behaviors with their mothers during clinical observations. For example, daughters of depressed mothers often entertained, organized, directed, gave approval, or tended to the emotional needs of their mothers.

Although the authors reported no gender differences, Gotlib and Goodman (1999) described a somewhat similar study comparing two and three year old children of mothers who had been diagnosed during the children's infancy with unipolar depression and those without psychiatric diagnoses. Children of mothers with depression demonstrated more maladaptive empathy than children of mothers without psychiatric diagnoses. For instance, children of mothers with depression made attempts to appease their mothers' distress during clinical observations. Furthermore, the same children demonstrated a greater ability than children in the control group to inhibit their own negative emotions. Thus, when hurt or frustrated, children of depressed mothers often suppressed their feelings and thus, stopped themselves from dealing with those emotions in constructive ways. At first glance, these children could appear extra healthy to parents, teachers, or other caregivers because they respond to others' emotions in sensitive ways and do not demand attention or help from others in terms of dealing with their own emotions. Such patterns, however, have been linked with future internalizing disorders.

Like Lyons-Ruth et. al (2002), Sinclair and Murray (1998) noticed gender differences in the school adjustment of young children who had experienced



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maternal depression. They found that girls of depressed mothers demonstrated lower incidences of behavior problems than boys of depressed mothers and when compared to both boys and girls of non depressed mothers. This indicates that girls' behavior in response to their mothers' depression may appear even better adjusted than children not experiencing the stress of a parent diagnosed with a psychiatric illness. Thus, it is possible that girls' relationships with their depressed mothers are closer and healthier than depressed mothers' relationships with their sons. It is also possible that depressed mothers' relationships with their daughters are instead marked by enmeshment whereby depressed mothers pull away from their partners and focus their energies on their daughters. Such relationships are damaging because daughters can be set up to ignore their own emotional needs in order to tend to those of their mothers. In this way, girls' "better" behavior could be masking parent-child patterns of role reversal and the subsequent development of girls' internalizing problems.

Murray et. al (1999b) also noticed gender differences in the doll house play of five year old children whose mothers had been depressed during the children's infancy. Girls of depressed mothers were more likely than boys to play out scenes where characters representing themselves engaged in caretaking behavior towards their mothers. Interestingly, however, those same girls played out more scenes depicting maternal care towards children than boys of depressed mothers as well as in comparison to girls or boys of non depressed mothers. Levels of maternal care displayed during clinical observations in the same study revealed that children's doll house play matched raters' observations regarding the actual degree of maternal care between mothers and children regardless of depressed or non depressed group status. Thus, the authors concluded that females of depressed mothers in this study had markedly different relationships with their mothers than did boys of depressed



mothers. The authors hypothesized that mothers with depression may be more responsive to their same sex children. They guessed that such differences could relate to conflicts between mothers who are depressed and their spouses, resulting in maternal feelings of disengagement from their partners and then disengagement from male children as well. Obviously, questions regarding the health or unhealth of maternal closeness with their children in relation to gender differences require future study.

Whether due to parenting difficulties, attachment concerns, family conflict, or combinations of these and other factors, several other studies have linked maternal depression to maladjustment during the toddler, preschool years, and early school years (Ashman & Dawson, 2002; Compas et. al, 2002; Essex et. al, 2001; Field, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999; Lyons-Ruth et. al, 2002; Murray et. al, 1999a; Sinclair & Murray, 1998; Wright et. al, 2000). In all of these studies, questions regarding the influence of maternal depression during infancy versus the role of more recent maternal depression were key.

Field (2002) reported that 75% of mothers who had experienced post partum depression in one study continued to report depressive symptoms at their children's third birthdays. These preschool children whose mothers had experienced such chronic as well as recent depression were more likely to demonstrate externalizing or internalizing behavior problems in comparison to children whose mothers had experienced only short term post partum depression or no depression at all.

Sinclair and Murray (1998) concluded that recency of children's exposure to maternal depression had more of an influence on children's adjustment than exposure during infancy as a result of their study examining the effects of maternal depression on school adjustment. The researchers reported that children's maturity



went down in relation to the recency of children's exposure to maternal depression. In other words, the more recent children's exposure to maternal depression, the lower the maturity scores assigned by teachers. Likewise, the same researchers noted that children's emotional intensity went up in relation to the recency of their exposure to maternal depression. Distractibility, activity levels, and externalizing behavior problems were also positively correlated with recency of maternal depression for boys.

Later, however, Murray et. al (1999a) found that toddler behavior problems, cognitive impairments, and interaction problems related to maternal post partum depression even when depressive symptoms remitted during infancy, suggesting that exposure to maternal depression during infancy has lasting effects on young children. Murray, Woolgar, Cooper, and Hipwell (2001) also found that exposure to maternal depression along with maternal hostility during infancy predicted negative cognitions for five year old children during a situation in which children were dealt losing rather than winning hands of cards. Recency of exposure to maternal depression or maternal hostility did not correlate with negative childhood cognitions in the same study. Likewise, Wright et. al (2000) found that preschool age children's academic difficulties, behavior problems, and peer problems correlated more with maternal depression during infancy than recent exposure to maternal depression.

Other researchers described how duration of maternal depression influenced childhood adjustment outcomes. For example, Ashman and Dawson (2002) indicated that duration of maternal depression correlated with preschool children's stress levels in one study. When duration of depressive symptoms went up, children's cortisol levels went up too, thus indicating higher levels of stress for the children exposed to maternal depression during infancy. It is important to note that



higher levels of cortisol related to emotional problems later in life in other studies.

Middle Childhood Development

Children in the middle childhood years are affected by maternal depression as well (Ashman & Dawson, 2002; Gotlib & Goodman, 1999; Radke-Yarrow & Klimes-Dougan, 2002; Wright et. al, 2000). Gotlib and Goodman (1999) stated that depressed mothers of eight to ten year olds in one study demonstrated more disapproval, dislike, and rejection towards their children than non depressed mothers. As maternal negativity increased so did the incidence of childhood psychiatric disorder. Wright et. al (2000) similarly linked maternal depression to school age children's adjustment problems. To be more specific, Ashman and Dawson (2002) concluded that school age children who had been affected by maternal depression during infancy were more at risk for peer problems, depressive or anxiety disorders, or externalizing behavior problems in comparison to children who had not been exposed to maternal depression during infancy. Radke-Yarrow and Klimes-Dougan (2002) agreed, estimating that half of the children in their study whose parents had experienced depressive disorders developed the adjustment difficulties just described.

In one of the few studies comparing children of depressed mothers with children of non depressed psychiatric patients, non depressed medical patients, and healthy controls, Gotlib and Goodman (1999) found that children of depressed mothers and children of mothers with other psychiatric diagnoses had the most externalizing and internalizing behavior problems based on clinical interviews and maternal ratings. Ten months later, the researchers reassessed children in all four groups and compared behavior ratings with the remittance or non remittance of depressive symptoms for the depressed mothers. Results indicated that regardless of remittance of depression, children of earlier depressed mothers continued to have



higher rates of externalizing and internalizing behavior problems (i.e., mood disorders or somatic complaints) than children of medical patients or healthy mothers. Since little to no differences existed between the depressed mothers group and the group of mothers diagnosed with other psychiatric disorders, more research is needed to investigate whether youth maladjustment patterns are specifically a result of maternal depression or are a result of factors linked to a variety of psychiatric disorders.

Adolescent Development

Few studies focused on the effects of maternal depression on adolescent development specifically. Gotlib and Goodman (1999) indicated, however, that relationships between mothers and teens are potentially disrupted during a critical time when mothers are depressed. They described that depressed mothers of adolescents are more likely than non depressed mothers of adolescents to engage in angry outbursts with their teens. Furthermore, they are more likely than non depressed mothers to alternate between patterns of withdrawal and patterns of displaying overly controlling behavior with their sons or daughters. Such disturbances in parent-teen interactions come at a time when adolescents are striving to explore who they are both in relation to and separate from their parents. Not surprisingly then, Wright et. al. (2000) reported that maternal depression has been linked to adolescent externalizing and internalizing behavior problems.

Sheeber, Davis, and Hops (2002) noted gender differences when comparing adjustment of adolescents who have depressed and non depressed mothers. Specifically, they found girls to be more at risk than boys for depression which should not be surprising considering more females than males report adult depression as well. The researchers noted that adolescent daughters' moods highly correlated with mothers' moods, but sons moods' did not. Thus, the researchers



hypothesized that female depression may be considered "normal" by family members affected by mothers' depression over long periods of time and thus, passed on to daughters although the pathways of transmission are not yet understood. More research is needed in order to better understand the pathways or risk for adolescents who have been affected by maternal depression. Specifically, this author believes more research is needed to ascertain the relationships between gender differences in young children who are responding to maternal depression (i.e., controlling coercive behavior versus controlling care taking behavior) and the adjustment outcomes of adolescents in relation to gender (i.e., externalizing versus internalizing disorders).

Long Term Youth Adjustment Outcomes

In a rare multigenerational study, Warner, Weissman, Mufosn, and Wickramaratne (1999) studied the effects of depression across three generations of approximately 90 families over the course of ten years. Findings indicated that grandchildren of various ages were most at risk when both their parents and grandparents had received diagnoses of MDD. In fact, 49% of these grandchildren had been diagnosed with some form of psychopathology. Most commonly, these children presented with anxiety symptoms which have been linked in other studies with the prediction of later depressive disorders. For children whose parents but not grandparents had received diagnoses of MDD, children were more at risk for the development of disruptive disorders (i.e., attention deficit disorder) in comparison to children whose parents had not been diagnosed with depressive disorders. This finding was particularly true for male children. The authors concluded that environmental influences rather than genetic ones were responsible for the development of ADD in offspring of depressed parents. They stated that depressed parents were more likely than non depressed parents to exhibit impaired functioning



as well as drug or alcohol abuse. These two factors related to parenting behaviors marked by lax structure, ineffective discipline practices, and decreased attention for their children. These parenting problems correlated with childhood diagnoses of ADD as well.

In an earlier phase of the same study, Beardslee et. al (1998) summarized that when the individuals in the "parent" generation were children or adolescents, offspring of depressed parents had higher rates of MDD, suicide, phobias, panic disorder, and alcohol dependence as compared to offspring of non depressed parents. The earlier the onset of depressive symptoms in the "parent" generation, the more the number of episodes of depression experienced by individuals over time. The average age of onset for depressive episodes in the "parent" generation was fifteen to twenty years of age. Not surprisingly, individuals in the "parent" generation who had depressed parents were more likely to experience decreased functioning at home, work, and in their marriages as compared to individuals in the "parent" generation who did not have depressed parents. It is also important to note that 30% of those meeting criteria for MDD in the "parent" generation had not received treatment for their conditions.

Risk Mediators

Although children and adolescents growing up with depressed mothers are at risk for a variety of reasons, it is clear that not all children growing up with depressed mothers exhibit the same adjustment concerns. What accounts for these differences?

Chronicity and Severity of Mothers' Depression

Several researchers indicated that the chronicity and severity of mothers' depressive symptoms correlated with the severity of youth maladjustment (Beardslee et. al, 1998; Field, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999). In



a large study comparing children of parents with depression of mild versus severe degrees to those having no psychiatric illness, 24% of children of severely depressed parents had been diagnosed with a psychiatric disorder whereas only 16% of children without psychiatrically diagnosed parents had been diagnosed with psychiatric disorders themselves; the difference between children of mildly depressed and non depressed parents was much less (Gotlib & Goodman, 1999).

It is also important to note that it is common for mothers diagnosed with affective illnesses to have other psychiatric diagnoses as well (Beardslee et. al, 1998; Field, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999). For some, these include personality disorders, and as a result, it is difficult for researchers to discriminate between effects of depression and effects of underlying interaction styles which could relate to personality disorders or other psychiatric conditions (Beardslee et. al, 1998; Field, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999).

It is probable that no single risk factor places children of depressed mothers at risk for maladjustment. In fact, Beardslee et. al (1998) explained that youth maladjustment is most related to three risk factors, including duration of mother's affective illness, number of depressive episodes, and total number of psychiatric diagnoses. When duration, number of episodes, and total number of diagnoses went up, maladjustment rates went up for children as well.

Father's Health

Beardslee et. al (1998) indicated that when fathers as well as mothers are depressed, children's risk for maladjustment increases. Likewise, when fathers are not depressed, children of depressed mothers are less at risk for maladjustment. Thus, the involvement of a healthy parent is an important moderator of risk for kids whose mothers have affective illnesses. Gotlib and Goodman (1999) stated the



same. Hammen (2002) added that in some studies, 40% to 60% of mothers with depression were married to husbands who met diagnostic criteria for psychiatric disorders. With this in mind, many children of depressed mothers do not have an emotionally healthy parent available to help them cope with stress related to their mothers' depressive disorders.

Family Stressors

Whether fathers are emotionally healthy or experiencing symptoms of psychiatric disorders themselves, maternal symptoms of depression have been highly correlated with martial difficulties as well as financial stress (Beardslee et. al, 1998; Compas et. al, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999; Hammen, 2002; Wright et. al, 2000). Such family stress levels in numerous studies were linked to illness severity, chronicity, and comorbidity (Beardslee et. al, 1998; Compas et. al, 2002; Goodman & Gotlib, 2002; Gotlib & Goodman, 1999; Hammen, 2002; Wright et. al, 2000). Specifically, Beardslee et. al (1998, 2002) suggested that when parental divorce accompanied the occurrence of maternal depression, children were more at risk for problems than when divorce was not present.

Hammen (2002) explained elements of life stress experienced by children and adolescents growing up in families where at least one parent experiences MDD or dysthymia. First, children are likely confused by symptoms of maternal depression. Hammen asserted that more research is needed to determine how children perceive symptoms of depression in their parents so that preventive interventions could be targeted to deal with those perceptions and their effects on child adjustment.

Hammen also explained that both children and their parents are affected by the chronic family stress accompanying mothers' depressive symptoms. Marital



problems, divorce, discord in extended family relationships, job impairment, financial problems, health problems, or changes in family functioning are stressful for kids. More episodic stressors affect children and adolescents too. More research is needed in order to differentiate between the effects of chronic versus episodic stress factors on youth maladjustment when mothers have been diagnosed with depression.

Finally, Hammen detailed that children's own life stressors as well as their ability to cope with those stressors make a difference in youth adjustment as well. Kids with adjustment concerns as a result of growing up with parents who utilize problematic interaction styles are more likely than kids without adjustment concerns to experience high rates of conflict in their relationships with peers. This conflict can in turn make their adjustment concerns worse. Also, kids of depressed mothers are at increased risk for not having developed positive coping skills because mothers with depression model low self efficacy, low confidence, and decreased coping skills. As a result, kids of mothers who are depressed are at risk for multiple reasons. Not only do they experience higher levels of stress than kids with non depressed mothers but they also have fewer opportunities to learn adaptive coping skills from their maternal caregivers.

Multiple Risk Factors

Several researchers noted that multiple risk factors increase the likelihood that children affected by maternal depression will experience symptoms of maladjustment (Gotlib & Goodman, 1999; Beardslee, 2002; Beardslee et. al, 1998). Beardslee (2002) found that only 12% of children or adolescents whose only risk factor included maternal depression experienced depression themselves during adolescence whereas 6% of adolescents whose mothers had not experienced depression developed symptoms of depression themselves. When three or more



risk factors including maternal depression were present, however, 50% of the children developed depression in adolescence. In particular, the author reported that family alcoholism, anxiety, or parental conflict and divorce were the multiple risk factors most associated with youth maladjustment.

Treatment Issues

Kids who have mothers with depressive disorders are at risk for short term as well as long term emotional problems, especially when multiple risk factors are present. What factors contribute to the resilience of youth affected by maternal depression? Also, how can counselors make a difference in their work with children and adolescents affected by maternal depression? *Resiliency*

Beardslee (2002) described that although resiliency in children whose mothers experienced depression went up when the number of family risk factors went down, resiliency is not magical. Instead, he emphasized that children growing up with depressed parents face challenges which require understanding of self and others in relation to the myriad of stressors they may experience as a result of their mothers' depression. Specifically, the author described several child factors which have been linked to resiliency. These include flexible temperament, good physical health, absence of learning disabilities, good reasoning and insight, presence of success in or out of school, knowledge and understanding of depression, self determination, spirituality, sense of purpose and hope, support in and out of the family, capacity for intimacy, healthy emotional coping skills, a strong sense of self separate from one's family, and the belief that one can and will make a difference in the world. Furthermore, parents certainly play important roles in promoting resiliency in their children. Beardslee indicated that parent-child attachment is key in promoting health for children of depressed mothers. Additionally, kids need both



warmth and love as well as firm, consistent parenting if they are to survive and thrive in spite of their mothers' psychiatric problems.

Prevention

Overall, Beardslee (2002) asserted that treatment of mothers' depression is important in terms of protecting children but is definitely not the only intervention needed. The author emphasized the importance of open family communication and intervention in order to prevent as well as treat youth maladjustment problems. This is not surprising since several studies already sited in this paper emphasized that long term youth risk for maladjustment does not necessarily abate when maternal depressive symptoms improve.

Beardslee (2002) drew on his own long term research with multiple families in order to design a prevention program for those affected by parental depression. He described how families often move through a series of steps as they make sense of and cope with depression. Overall, the author stressed the importance of open family communication. He stated that it is important for practitioners to work with families to help them prepare for talking openly and honestly with their children in ongoing family meetings about parental depression, including its symptoms and the consequences of its symptoms on family life. All in the family need an opportunity to express their perceptions and feelings as well as to learn more about depression.

After kids have been heard, Beardslee described that kids need several other things as well. Regardless of age, youth are most in need of hearing from their parents that the family will be okay because they will not allow depression to take over their lives. Also, Beardslee described that it is important for parents to emphasize over and over that no one is to blame for depression. He asserted that difficult times like suicide attempts or hospitalizations need to be addressed honestly with kids as well.



Above all else, Beardslee stated that kids need to be able to ask their questions openly and need to receive answers honestly as well. Only when dialogue is truthful, ongoing, and accepted will kids have an opportunity to understand who they are both in relation to depression and family stress but also in relation to their lives apart from the realm of psychiatric illness. People are more than their diagnoses. Families are more than their specific stressors too. Thus, it is so important for youth to see how the stress of maternal depression is only one part of their lives. Who they are and who they choose to strive to be is so much more. *Intervention*

Not all youth concerns in relation to maternal depression can be or ever will be completely prevented. Treatment interventions are needed as well. Gladstone and Beardslee (2002) summarized treatment research in relation to infants, children, and adolescents.

Infants

For infants, the authors supported the use of Brazelton based interventions to teach moms how to appreciate and how to interact regularly with their infants. In comparing the effects of the Brazelton method with a control group who received no interventions, mothers who had completed the Brazelton intervention played more with their infants in positive ways. In response, the infants showed an increased ability to regulate their emotions.

Gladstone and Beardslee described another study which indicated that babies of depressed mothers showed increased responsiveness to adult interaction when the adults were known, non depressed caregivers (i.e., nursery caregivers) in comparison to the levels of babies' responsiveness to their depressed mothers. This finding underscores the importance of interaction between babies of depressed mothers and healthy day care providers. This author hypothesizes that such healthy,



regular interactions may have lasting effects on the adjustment of children dealing with maternal depression.

The authors summarized that interactive coaching has been successful in improving mother-infant interaction patterns. The authors concluded that coaching mothers to touch their infants in soothing ways when they express intense negative emotions may be the most important factor in the success of this intervention because mothers who tend to withdraw from their babies are encouraged to approach in positive ways, and mothers who tend to be hostile in their interactions with infants are encouraged to approach in more nurturing ways.

Toddlers and Preschool Age Children

Gladstone and Beardslee (2002) asserted that parent-child attachment interventions are crucial for mothers and their children when mothers have been diagnosed with MDD or dysthymia. In one study, the authors explained that percentage rates of insecure attachments between depressed mothers and their young children dropped to rates similar to those of non depressed mothers and their children following therapy sessions aimed at attachment intervention.

Elementary Age Children

Compas et. al (2002) described that children of depressed parents reporting high levels of stress in their lives also tended to report use of involuntary engagement type coping skills (i.e., intrusive thoughts, rumination, emotional arousal, physiological arousal, or impulsive action) rather than healthier, volitional types of coping skills such as primary control coping skills (i.e., problem solving, emotional expression, or emotional modulation) or secondary control coping skills (i.e., cognitive restructuring, positive thinking, acceptance, or distraction). The authors hypothesized that overwhelming levels of stress were associated with involuntary engagement responses because children were overwhelmed by their



feelings. It is possible that such responses could then contribute to more stress for children because they fear the feelings they do not know how to regulate. This fear could automatically lead to more use of involuntary coping responses. In this way, use of involuntary engagement coping responses could become routine for stressed children of depressed parents because they do not learn to regulate their emotions through use of primary or secondary coping skills.

How can counselors help such youth? Since children cannot solve their families' problems, several authors suggested that counselors help children use secondary control coping strategies in response to maternal depression and its accompanying life stressors (Compas et. al, 2002; Gladstone & Beardslee, 2002). Thus, counselors can teach children that they are not responsible for their parents' depression and are thus, not responsible for changing it. Counselors can also help children understand and accept depression, express their feelings, reframe problems, maintain positive attitudes, and distract themselves with healthy relationships and positive activities outside of their families. This author hypothesizes that use of bibliotherapy techniques could be one intervention aimed at meeting these goals.

Adolescents

Gladstone and Beardslee (2002) explained that group interventions in several studies have shown to be effective with adolescents exposed to maternal depression when such interventions have focused on self understanding in relation to maternal depression and the development of healthy communication skills. Two group interventions for adolescents affected by maternal depression have been studied. The first was a therapeutic group marked by education about depression and group discussion about familial experiences with depression. The second was a psycho educational group where adolescents had an opportunity to listen to information about depression in relation to its effects on family members. Overall,



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adolescents in the therapeutic groups improved more than adolescents in psycho educational groups although adolescents in both groups improved. Specifically, adolescents in the therapeutic groups demonstrated increases in their understanding of depression, decreases in guilt about their family situations, increases in positive interactions in and out of family relationships, and increases in global functioning.

Conclusion

Research indicated that children and adolescents growing up with mothers experiencing depressive disorders are at increased risk for both short and long term maladjustment problems. Many variables intervene, however, to determine individual youth responses. In this way, each child and family is unique. There is no single way to promote emotional health for children and families affected by maternal depression. It is most important for counselors to realize, acknowledge, and allow expression of each family member's experience. We must also help kids and parents realize they are not to blame for maternal depression. Identifying personal as well as family strengths is crucial as well. Only then can we assist youth in realizing that the stress of maternal depression is only one manageable part of their lives. It takes courage. It takes hope, and it most certainly takes love, but the legacy of depression's passage from generation to generation can be overcome. It is done one family at a time.



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